

ROCKY FLATS PLANT  
EMD RFI/RI WORK PLAN OU-5  
WOMAN CREEK PRIORITY  
DRAINAGE

Manual No.: 21100-WP-OU 05.1  
Procedure No.: Table of Contents, Rev 4  
Page: 1 of 2  
Effective Date: 01/10/94  
Organization: Environmental Management

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| • DCN 92.01<br>• 93-DMR-ERM-0034 | Improve Consistency with Lab Requirements<br>Modifications to Section 7 | 1               | EXPIRED               |
| 8.0                              | Baseline Health Risk Assessment Plan                                    | 1               | 02/24/92              |
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| DCN 92.01<br>• 94-DMR-ERM-0003   | Expired<br>Elimination of Daily Inspection                              | 1<br>1          | EXPIRED<br>01/10/94   |
| 11.0                             | Standard Operating Procedures and Addenda                               | 1               | 02/24/92              |
| 12.0                             | References  | 1               | 02/24/92              |

DOCUMENT CLASSIFICATION REVIEW WAIVER  
PER R.B. HOFFMAN, CLASSIFICATION OFFICE  
JUNE 11, 1991

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|------------------------|---|---------------------|-------------|
| APPA                   | Appendix A  | 0                   | 08/22/91    |
|                        | As Built Drawings for Pond C-2                                |                     |             |
|                        | C-2 Dam-General Plan<br>D 27165-231                           | A                   | 11/20/79    |
|                        | C-2 Dam-Cutoff Trench Plan and Dam Profile<br>D 27165-232     | A                   | 11/20/79    |
|                        | C-2 Dam-Embankment & Spillway Details<br>D 27165-235          | A                   | 11/20/79    |
|                        | C-2 Dam-Outlet Works<br>D 27165-236                           | A                   | 11/12/80    |
|                        | Outlet Works Inlet Structure & Pipe Details<br>D 27165-241    | A                   | 11/12/80    |
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| APPB                   | Appendix B<br>In Situ Radiological Survey of the Old Landfill | 0                   | 08/22/91    |
| APPC                   | Appendix C<br>Groundwater Analytical Data                     | 0                   | 08/22/91    |
| APPD                   | Appendix D<br>Sediment Analytical Data                        | 0                   | 08/22/91    |
| APPE                   | Appendix E<br>Surface Water Analytical Data                   | 0                   | 08/22/91    |
| TM 2                   | Technical Memorandum Number 2:<br>Surface Geophysical Surveys | 0                   | 11/01/93    |

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|   |  |
|---|--|
| 1. Date<br>12/23/93   | 25.<br>DMR. No. 93-DMR-ERM-003<br>1-391 SURD |
| 3. New Document Number or Document Number if it is to be changed with this Revision<br>N/A                |  |
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| 4. Originator's Name/Phone/Page/Location<br>E.C. Mast/8589/4672/080   |          |   | 5. Document Title<br>Phase I RFI/RI Work Plan, Woman Creek Priority Drainage Operable Unit No.5, Volume 1   |                             |  |
| 6. Document Type <input type="checkbox"/> Procedure<br><input checked="" type="checkbox"/> Other <u>Work Plan</u>   |          |   | 7. Document Modification Type (Check only one)<br><input type="checkbox"/> New <input checked="" type="checkbox"/> Revision <input checked="" type="checkbox"/> Intent Change <input type="checkbox"/> Nonintent Change <input type="checkbox"/> Editorial Correction <input type="checkbox"/> Cancellation |                             |  |
| 8. Item   | 9. Page  | 10. Step                                  | 11. Proposed Modifications  |                             |  |
| 1   | 7-43     | 7.4                                       | Delete the first 2 sentences of the third paragraph of this section.  |                             |  |
| 2   | 7-44     | Table 7-11                                | Replace Table 7-11 with the attached revised table.   |                             |  |
| 3   | 17 of 39 | 10.0                                      | Replace Table 2 with the attached revised table.  |                             |  |
| 12. Justification (Reason for Modification, EIOF, TPF, etc.)  |          |   |   |                             |  |
| 1. Field preservations blanks are not required because only certified clean sample containers are used for the OUS RFI/RI.  |          |   |   |                             |  |
| 2,3 The field QC sample requirements stated in these two tables are not in agreement causing considerable confusion as to what requirements apply to sampling activities in OUS. These tables also require revision to incorporate the change identified under Item 1, above.                             |          |   |   |                             |  |
| If modification is for a new procedure or a revision, list concerning disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then Contractor prints, and signs in Block 14, and date in Block 15. |          |   |   |                             |  |
| 13. Organization  |          | 14. Print and Sign (if applicable)        |   | 15. Date (if applicable)    |  |
| ERM   |          | Edward C. Mast                            |   | 12/23/93                    |  |
| EQS   |          | Mike C. Brooks                            |   | 1/3/94                      |  |
|   |          |   |   |                             |  |
|   |          |   |   |                             |  |
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|   |          |   |   |                             |  |
|   |          |   |   |                             |  |
| 16. Originator's Supervisor (Print/Sign/Date)<br>Tim P. O'Rourke <i>T.P.O.R.</i> 23-Dec-93  |          |   |   |                             |  |
| 17. Assigned State/Phone/Page/Location<br>E. Mast 8589/4672/080   |          | 18. Cost Center<br>0293                   |   | 19. Change Number<br>989479 |  |
| 20. Requested Completion Date<br>1/03/94  |          | 21. Effective Date<br>01/04/94            |   |                             |  |
| 22. Accelerated Review?<br>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |          | 23. ORC Review<br>ORC Review Not Required |   |                             |  |
| 24. Responsible Manager (Print, Sign, Date)<br><i>T.P.O.R.</i> Tim P. O'Rourke 4-Jan-94   |          |   |   |                             |  |

REVIEWED FOR CLASSIFICATION/UC

BY NA  
DATE NA

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FOR R.B. HOFFMAN, CLASSIFICATION OFFICE  
JUNE 11, 1991

#### 7.3.4 Sample Handling and Documentation

Sample control and documentation is necessary to ensure the defensibility of data and to verify the quality and quantity of work performed in the field. Accountable documents include logbooks, data collection forms, sample labels or tags, chain-of-custody forms, photographs, and analytical records and reports. Specific guidance defining the necessary sample control, identification, and chain-of-custody documentation is discussed in SOP FO.14.

#### 7.3.5 Data Reporting Requirements

Field data will be input into the RFEDS using a remote data entry module supplied by EG&G. Data will be entered on a timely basis and a 3.5-inch diskette will be delivered to EG&G. A hard copy report will be generated from the module for contractor use. The data will be put through a prescribed QC process based on SOP FO.14 to be generated by EG&G.

A sample tracking spreadsheet will be maintained by the contractor for use in tracking sample collection and shipment. EG&G will supply the spreadsheet format and will stipulate the timely reporting of the information. This data will also be delivered to EG&G on 3.5-inch diskettes. Computer hardware and software requirements for contractors using government supplied equipment will be supplied by EG&G. Computer and data security will also follow acceptable procedures outlined by EG&G.

### 7.4 FIELD QC PROCEDURES

Sample duplicates, field preservation blanks, and equipment rinsate blanks will be prepared. Trip blanks will be obtained from the laboratory. The analytical results obtained for these samples will be used by the Environmental Restoration (ER) Project Manager to assess the quality of the field sampling effort. The types of field QC samples to be collected and their application are discussed below. The frequency for QC samples to be collected and analyzed is provided in Table 7-11.

Duplicate samples will be collected by the sampling team and will be used as a relative measure of the precision of the sample collection process. These samples will be collected at the same time, using the same procedures, the same equipment, and in the same types of containers as required for the samples. They will also be preserved in the same manner and submitted for the same analyses as required for the samples.

~~Field preservation blanks of distilled water, preserved according to the preservation requirements (Subsection 7.3.3), will be prepared by the sampling team and will be used to provide an indication of any contamination introduced during field sample preparation technique. As indicated by Table 7-11, these QC samples are applicable only to samples requiring chemical preservation. Equipment (rinsate) blanks will be collected from a final decontamination rinse to evaluate the success of the field sampling team's decontamination efforts on nondedicated sampling equipment.~~

93-DMR-ERM-0034

TABLE 7-11  
FIELD QC SAMPLE FREQUENCY

| Sample Type              | Type of Analysis     | Media  |   |
|--------------------------|----------------------|--------|---|
|                          |                      | Solids | Liquids                                   |
| Duplicates               | Organics             | 1/10   | 1/10                                      |
|                          | Inorganics           | 1/10   | 1/10                                      |
|                          | Radionuclides        | 1/10   | 1/10                                      |
| Equipment Rinsate Blanks | Organics             | 1/20   | 1/20                                      |
|                          | Inorganics           | 1/20   | 1/20                                      |
|                          | Radionuclides        | 1/20   | 1/20                                      |
| Trip Blanks              | Organics (Volatiles) | NR     | <del>1/20</del> 1 PER VOC COLLECTION DAY* |
|                          | Inorganics           | NR     | NR  |
|                          | Radionuclides        | NR     | NR  |

NR = Not Required

\* TRIP BLANK TO ACCOMPANY THE ASSOCIATED VOC SAMPLE COLLECTION  
AND SHIPMENT TO THE LABORATORY

Equipment blanks are obtained by rinsing cleaned equipment with distilled water prior to sample collection. The rinsate is collected and placed in the appropriate sample container. Equipment rinsate blanks are applicable to all analyses for water and soil samples as indicated in Table 7-11.

Trip blanks consisting of deionized water will be prepared by the laboratory technician and will accompany each shipment of water samples for volatile organic analysis. Trip blanks will be stored with the group of samples with which they are associated. Analysis of the trip blank will indicate migration of volatile organics or problems associated with the shipment, handling, or storage of the samples.

Procedures for monitoring field QC are given in the site-wide Quality Assurance Project Plan (QAPjP).